

**Minnesota Department of Health
Emerging Infections Program
Unexplained Critical Illnesses and Deaths Surveillance**

**Laboratory Specimens
Collection and Handling of Clinical Specimens**

Following is a list of clinical specimens that may be useful in determining an etiology for cases of unexplained illness that are likely to have infectious causes. These specimens should be saved for possible cases:

Specimen	Time of collection*	Optimal volume*	Container	Temperature for storing/shipping†
Inoculated blood culture bottles	Near time of admission	5 ml	Commercial blood culture bottles	Refrigerated
Bronchial alveolar lavage from bronchoscopy	Any	10 ml	Sterile container	Refrigerated
Cerebrospinal fluid	Any	2.5 ml	Sterile container	Refrigerated
Naso/oropharyngeal swab or aspirate	Any		Sterile container	Refrigerated
Pericardial fluid	Any	10 ml	Sterile container	Refrigerated
Peritoneal fluid	Any	10 ml	Sterile container	Refrigerated
Pleural fluid	Any	10 ml	Sterile container	Refrigerated
Serum, acute	Near time of admission	5 ml	Marbled red top tube (vacutainer with serum separator)	Refrigerated
Serum, convalescent	Near time of discharge	5 ml	Marbled red top tube	Refrigerated
Stool or rectal swab	Near time of admission	1 gm	Fixed in formalin and PVA	Room temperature if fixed; otherwise refrigerated
Synovial fluid	Any	10 ml	Sterile container	Refrigerated
Urine	Near time of admission (without centrifugation)	5 ml	Sterile container	Refrigerated
Whole blood	Near time of admission	5 ml	Purple top tube (vacutainer with EDTA anti-coagulant)	Refrigerated

* Please save/send any available specimens listed. While timing of collection and volume of some specimens may not be optimal, it may still be possible to use them for testing.

†If a specimen is already frozen, please keep it frozen.